

## WHAT IS CLAIMED IS:

## 1. A base station apparatus, including:

a receiver which receives signals from a terminal apparatus which is a targeted communication party;

a permissible delay time detector which detects, from the signals received by said receiver, permissible delay time in data communication corresponding to an application used in said terminal apparatus;

a decision unit which determines a transmission rate per channel and the number of channels to be allocated to said terminal apparatus, in a communication line that contains a plurality of channels, according to the permissible delay time detected by said detector; and

an instruction unit which instructs said terminal apparatus to perform communication of data corresponding to the application by using the communication rate per channel and the number of channels determined by said decision unit.

2. A base station apparatus according to Claim 1, further including a quality detector which derives from the received signals a value indicative of the quality of a communication line, wherein said decision unit determines the transmission rate per channel and the number of channels to be allocated to said terminal apparatus according to the permissible delay time detected by said detector, the value indicative

of the quality of a communication line and a current channel usage rate in the communication line containing a plurality of channels.

3. A base station apparatus according to Claim 2, wherein said decision unit so determines that the transmission rate per channel is raised and the number of channels is reduced according to the derived value indicative of the quality of a communication line if the detected permissible delay time is greater than a predetermined threshold value and that the transmission rate per channel is lowered and the number of channels is increased according to the channel usage rate if the detected permissible delay time is less than or equal to the predetermined threshold value.

4. A communication system, including:

    a terminal apparatus which uses a predetermined application; and

    a base station apparatus which communicates with said terminal apparatus via a communication line containing a plurality of channels,

    wherein said terminal apparatus transmits information on permissible delay time in data communication corresponding to the predetermined application to be used, and wherein said base station apparatus detects quality of the communication line and a channel usage rate and

determines a transmission rate per channel and the number of channels to be allocated to said terminal apparatus based on the information on permissible delay time received from said terminal apparatus together with the quality of the communication line and channel usage rate detected.

5. A channel allocating method characterized in that, based on permissible delay time in data communication corresponding to an application used in a terminal apparatus which is a targeted communication party, a transmission rate per channel and the number of channels to be allocated to the terminal apparatus are determined for a plurality of channels contained in a communication line connected with the terminal apparatus.

6. A channel allocating method, including:

receiving signals from a terminal apparatus which is a targeted communication party;

detecting, from the signals received by said receiving, permissible delay time in data communication corresponding to an application used in said terminal apparatus;

determining a transmission rate per channel and the number of channels to be allocated to the terminal apparatus, in a communication line that contains a plurality of channels, according to the permissible delay time detected by said detecting; and

instructing the terminal apparatus to perform communication of data corresponding to the application by using the communication rate per channel and the number of channels determined by said determining.

7. A channel allocating method according to Claim 6, further including deriving from the received signals a value indicative of the quality of a communication line, wherein said determining a transmission rate per channel and the number of channels determines the transmission rate per channel and the number of channels to be allocated to the terminal apparatus according to the permissible delay time detected by said detecting, the derived value indicative of the quality of a communication line and a current channel usage rate in the communication line containing a plurality of channels.

8. A channel allocating method according to Claim 7, wherein said determining a transmission rate per channel and the number of channels is such that the transmission rate per channel is raised and the number of channels is reduced according to the derived value indicative of the quality of a communication line if the detected permissible delay time is greater than a predetermined threshold value and that the transmission rate per channel is lowered and the number of channels is increased according to the channel usage rate if

the detected permissible delay time is less than or equal to the predetermined threshold value.

9. A program executable by a computer, the program including the functions of:

receiving signals from a terminal apparatus which is a targeted communication party;

detecting, from the signals received by said receiving, permissible delay time in data communication corresponding to an application used in said terminal apparatus;

determining a transmission rate per channel and the number of channels to be allocated to the terminal apparatus, in a communication line that contains a plurality of channels, according to the permissible delay time detected by said detecting; and

instructing the terminal apparatus to perform communication of data corresponding to the application by using the communication rate per channel and the number of channels determined by said determining.

10. A program according to Claim 6, further including the function of deriving from the received signals a value indicative of the quality of a communication line, wherein said determining a transmission rate per channel and the number of channels determines the transmission rate per channel and the number of channels to be allocated to the

terminal apparatus according to the permissible delay time detected by said detecting, the derived value indicative of the quality of a communication line and a current channel usage rate in the communication line containing a plurality of channels.

11. A program according to Claim 10, wherein said determining a transmission rate per channel and the number of channels is such that the transmission rate per channel is raised and the number of channels is reduced according to the derived value indicative of the quality of a communication line if the detected permissible delay time is greater than a predetermined threshold value and that the transmission rate per channel is lowered and the number of channels is increased according to the channel usage rate if the detected permissible delay time is less than or equal to the predetermined threshold value.